

PPH



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,605	01/24/2002	Steven Yellin Schondorf	201-0378 FAM	9340

28549 7590 11/10/2004

KEVIN G. MIERZWA  
ARTZ & ARTZ, P.C.  
28333 TELEGRAPH ROAD, SUITE 250  
SOUTHFIELD, MI 48034

EXAMINER

HERNANDEZ, OLGA

ART UNIT	PAPER NUMBER
----------	--------------

2144

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/683,605

**Applicant(s)**

SCHONDORF ET AL.

**Examiner**

Olga Hernandez

**Art Unit**

2144

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 4-9, 12-15 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 22 is/are allowed.
- 6) ☒ Claim(s) 4-8, 12-15, 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 9/14/04 have been fully considered but they are not persuasive.

Applicant argues that the relationship between the operation state of an airbag and the failure of the operation control section of an airbag is different than comparing an airbag deployment time and a fault time. The examiner disagrees. Deployment is to put into use or action, while operation is the act or process of functioning. Further, applicant's hindsight reasoning support that the operation state is the deployment of the airbag no matter if it is partially or fully **deployed**, *it is deployed*. Moreover, the applicant is arguing subject matter that has not been claimed such as the RCMs fault times associated with the airbag igniter. Regarding operation time applicant's argument, Byon teaches storing the time in column 6, line 6 through column 7, line 2. therefore, this rejection is repeated and made final.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-6, 12, 14, 15, 23-25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (5,847,472) in view of Okada (2002/0091474).

As per claims 4, 12, 14, 24 and 25, Byon teaches:

Art Unit: 2144

- a memory device for storing a deployment time of a deployment event (column 7, lines 1-2); and
- a controller electrically coupled to the memory device (figure 1), the controller determining when to deploy a restraint and storing the deployment time, the fault time indicative of a fault within a component selected from at least one of the RCM and the at least one impact sensor, (column 6, lines 64-67 and abstract);
- fault time, start time, duration time and end time (column 6, lines 64-67).

Byon does not teach a comparator coupled to the controller for comparing the deployment time with the fault a fault time and determining whether the fault time corresponds with the deployment time. However, Okada teaches tracking down the relationship between the operation state of the airbag and the failure of the operation control section of the airbag (paragraph [0006]). Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to track down the cause of the collision with small memory capacity.

As per claims 15, 23 and 26, Byon teaches sensing a collision (column 6, line 42); generating a collision signal in response to the collision (column 6); deploying a restraint in response to the collision (column 7); storing the deployment time (column 6, lines 64-67) and continuously indicating a fault in response to the deployment event (column 7). Neither of the prior art teaches the memory device that is unerasable, unresettable and unoverwritable. However, it would have been obvious to one of ordinary skill in the art to substitute a storage device for another storage device in order to make sure that the information will not be lost.

Art Unit: 2144

As per claim 5, Byon does not teach indicating when a deployment time corresponds with a fault time. However, Okada teaches track down the relationship between the operation state of the airbag and the failure of the operation control section of the airbag (paragraph [0006]). Moreover, Okada teaches the data indication no matter the situation (paragraph [0007]).

As per claim 6, neither Byon nor Okada teaches the indicator disclosed by the applicant. However, Okada teaches the data indication no matter the situation (paragraph [0007]). Therefore, it would have been obvious to one of ordinary skill in the art to substitute any means for another means to perform the same function.

3. Claims 7, 8, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byon (5,847,472) in view of Otsu (6,231,075).

As per claims 7 and 8, Byon teaches:

- a memory device for storing a deployment time of a deployment event (column 7, lines 1-2); and
- a controller electrically coupled to the memory device (figure 1), the controller determining when to deploy a restraint and storing the deployment time (column 6, lines 64-67).

Byon does not teach an indicator electrically coupled to the controller, the indicator continuously indicating that the RCM has been on a vehicle that has been involved in a collision, until such time when the RCM is serviced or replaced. However, Otsu teaches a controller continuous monitoring the waveform of the collision signal provided by the collision sensor after the first squib has been initiated (column 5, line 17-31). Further, it would have been obvious to one of ordinary skill in the art that it will keep doing so until is replaced or get some kind of

Art Unit: 2144

service. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide an automotive airbag inflator for controlling an inflating speed of an airbag according to an intensity of an impact in dependency on collision modes of the vehicle against an obstacle.

As per claim 13, Byon does not teach an indicator electrically coupled to the controller, the indicator continuously indicating that the RCM has been on a vehicle that has been involved in a collision, until such time when the RCM is serviced or replaced. However, Otsu teaches a controller continuous monitoring the waveform of the collision signal provided by the collision sensor after the first squib has been initiated. Further, it would have been obvious to one of ordinary skill in the art that it will keep doing so until is replaced or get some kind of service. Therefore, it would have been obvious to one of ordinary skill in the art to combine the aforementioned inventions in order to provide an automotive airbag inflator for controlling an inflating speed of an airbag according to an intensity of an impact in dependency on collision modes of the vehicle against an obstacle.

***Allowable Subject Matter***

Claims 9 and 22 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: no prior art teaches storing the restraint power draw value during the deployment event.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

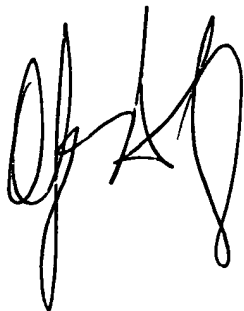
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Hernandez whose telephone number is (703) 305-0918. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A. Cuchlinski can be reached on (703) 308-3873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2144

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Olga Hernandez  
Examiner  
Art Unit 2144



WILLIAM A. CUCHLINSKI, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3800